



UNITED STATES PATENT AND TRADEMARK OFFICE

ml

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/649,978

08/26/2003

David N. Nelson

6103

6716

7590

09/26/2006

The Reilly Intellectual Property Law Firm, P.C.
1554 Emerson Street
Denver, CO 80218

EXAMINER

SPAHN, GAY

ART UNIT

PAPER NUMBER

3635

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/649,978	NELSON, DAVID N.	
	Examiner	Art Unit	
	Gay Ann Spahn	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/30/05, 3/13/06 & 6/30/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-37 is/are pending in the application.
- 4a) Of the above claim(s) 35-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | * Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/30/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I (i.e., vacuum apparatus, claims 22-30 and 31-34) in the reply filed on 30 June 2006 is acknowledged.

Claims 35-37 (i.e., method of separating debris from rock in dry environment) are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 30 June 2006.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 30 November 2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

However, the eight (8) items listed in the U.S. Patent Documents section have all been lined through as having already been considered as evidenced by the initialed, signed, and dated copy of a 17 February 2004 Information Disclosure Statement (i.e., PTO-Form-1449) attached to the Office Action mailed on 08 June 2004 (i.e., Paper No. 05252004).

Response to Amendment

The amendment filed on 30 November 2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

(1) on page 2, lines 4-5, of the Amendment filed on 13 March 2006, the sentence “[a]n apparatus for separating debris from rock on a surface free of standing water” is considered to constitute new matter;

(2) on page 2, lines 14-19, of the Amendment filed on 13 March 2006, the statement of “to facilitate advancing in a slightly raised position above the surface to permit the introduction of air, debris and rock into the intake portion whereupon any debris lighter than rock will be drawn upwardly through the outlet portion into the vacuum source and any rock lifted from the surface will return to the landscape surface” is considered to constitute new matter;

(3) on page 3, lines 16-17, of the Amendment filed on 13 March 2006, the statement of “or any other type of vacuum power source” is considered to constitute new matter;

(4) on page 4, lines 16-17, of the Amendment filed on 13 March 2006, the statement of the inlet portion 105a “extending centrally through” an end wall 118a is considered to constitute new matter;

(5) on page 4, lines 24-26, of the Amendment filed on 13 March 2006, the statement that handles 110 and 112 "facilitate advancement of the apparatus in a slightly raised position above a surface to permit the introduction of air, debris and rock into the intake portion 106" is considered to constitute new matter;

(6) on page 4, lines 26-28, of the Amendment filed on 13 March 2006, the statement of "[a]s shown in Figures 1, 2 and 3, the handle 110 extends parallel to the longitudinal axis of the intake portion 106 and handle 112 extends at an angle to it" is considered to constitute new matter;

(7) on page 6, lines 17-19, of the Amendment filed on 13 March 2006, the statement that "[t]he head assembly 104 also includes an end portion 113 extending centrally through an end wall 118a into fluid communication with the interior of the intake portion 106" is considered to constitute new matter;

(8) on page 8, lines 1-2, of the Amendment filed on 13 March 2006, the statement that "[n]ecessarily, the intake portion 106 is of a length substantially greater than that of the outlet portion 108" is considered to constitute new matter;

(9) on page 8, lines 3-4, of the Amendment filed on 13 March 2006, the statement of "[t]he combination of the intake portion 106 and the outlet portion 108 is of a length to extend to the waist level of a user" is considered to constitute new matter;

(10) the newly added structure of handle 112 shown on the Replacement Sheet of Fig. 1 in the Amendment filed on 30 November 2005 is considered to constitute new matter; and

(11) the newly added structure of handle 112 shown on the Replacement Sheet of Fig. 3 in the Amendment filed on 30 November 2005 is considered to constitute new matter

Applicant is required to cancel the new matter in the reply to this Office Action.

Drawings

The drawings are objected to because:

(1) Fig. 1 on the Replacement Sheet filed 30 November 2005, the lead lines leading from reference numerals "108" and "120" do not appear to lead to any particular structure and therefore, it is not understood what structure constitutes the "outlet portion" and the "outer skirt", respectively;

(2) Fig. 2 on the Replacement Sheet filed 30 November 2005, the lead line leading from reference numeral "120" does not appear to lead to any particular structure and therefore, it is not understood what structure constitutes the "outer skirt"; and

(3) Fig. 3 on the Replacement Sheet filed 30 November 2005, the lead line leading from reference numeral "108" does not appear to lead to any particular structure and therefore, it is not understood what structure constitutes the "outlet portion".

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

Art Unit: 3635

is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because:

(1) reference characters "108" and "105b" have both been used to designate "outlet portion";

(2) reference characters "104" has been used to designate "head assembly" and reference numeral "108" has been used to designate "outlet portion", but the examiner does not understand what the difference in structure is between the "head assembly 104" and the "outlet portion 108" because they both appear to be the same structure.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet

Art Unit: 3635

submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

A substitute specification excluding the claims is required pursuant to 37 CFR 1.125(a) because Applicant's instructions on how to amend the specification in the Amendment filed on 13 March 2006 are ambiguous.

For instance, on page 2, lines 20-21, of the Amendment filed on 13 March 2006, Applicant instructs that page 3, line 12 through page 5, line 7, of the specification (i.e., six (6) paragraphs from paragraph no. [0009] to paragraph no. [00014]), be replaced with only two (2) paragraphs.

But then on page 3, lines 3-4, of the Amendment filed on 13 March 2006, Applicant instructs that page 3, line 16 through page 5, line 7, of the specification (i.e., four (4) paragraphs from paragraph no. [00011] to paragraph no. [00014]), be replaced with four (4) paragraphs.

Since these two sets of instructions appear to overlap and therefore be ambiguous, the examiner is requiring a substitute specification in response to this Office Action in order to make it clear exactly what in the specification is being amended.

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

However, in order to go ahead with an examination of the present application and not have to send out a second Notice of Non-Compliant Amendment, the Examiner is treating the instruction at page 2, lines 20-21, of the Amendment filed on 13 March 2006 as if it stated the following instruction:

"Page 3, line 12 through page 3, line 15, replace the existing paragraphs (i.e., paragraph nos. [0009] and [00010]) with the following paragraphs:"

The disclosure is objected to because of the following informalities:

(1) page 7, line 5, of Amendment filed on 13 March 2006, the word "assembly" should be changed to --assembly--.

Appropriate correction is required.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

More particularly, since the method claims have been restricted out of the application, the title of the invention should be amended to delete "AND METHOD".

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 22-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 22, line 8, the recitation of "including an end portion extending centrally though said end wall" is considered to constitute new matter.

Claim 22, lines 14-16, the recitation of "to facilitate advancement in a slightly raised position along said surface to permit the introduction of air, debris and rock into said intake portion" is considered to constitute new matter.

Claim 23, lines 2-3, the recitation that the intake portion and the outlet portion in combination "are of a length to extend substantially to the waist level of a user" is considered to constitute new matter.

Claim 25, line 2, the recitation that the first handle member extends “parallel” to a longitudinal axis of the intake portion is considered to constitute new matter.

Claim 26, lines 2-3, the recitation that “said a second handle member extends at an angle to said first handle member” is considered to constitute new matter.

Claim 27, line 2, the recitation that the handle members “are located on said intake and outlet portions” is considered to constitute new matter.

Claim 29, lines 2-3, the recitation that “said intake portion is at least twice as long as said outlet portion” is considered to constitute new matter.

Claim 31, lines 6-7, the recitation that “said first diameter being almost twice as great as said second diameter” is considered to constitute new matter.

Claim 31, line 9, the recitation of “a means for deflecting rocks from entering said outlet portion” is considered to constitute new matter.

Claim 31, lines 16-17, the recitation of “being of a length to extend to the waist level of a user” is considered to constitute new matter.

Claim 33, lines 1-3, the recitation that “a diameter of said open entrance end is equivalent to a diameter of said opposite end wall” is considered to constitute new matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 22-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22, line 16, the recitation of “any debris” is vague, indefinite, and confusing as lacking antecedent basis because it is not clear if this “debris” is the same as or different from the “debris” introduced in line 15.

Claim 22, line 17, the recitation of “rock” is vague, indefinite, and confusing as lacking antecedent basis because it is not clear if this “rock” is the same as or different from the “rock” introduced in line 16.

Claim 22, line 18, the recitation of “any rock” is vague, indefinite, and confusing as lacking antecedent basis because it is not clear if this “rock” is the same as or different from the “rock” introduced in line 16 and recited again in line 17.

Claim 22, line 19, the recitation of “the landscape surface” is vague, indefinite, and confusing as lacking antecedent basis because it is not clear if the “landscape surface” is the same as or different from the “surface free of standing water” introduced in line 2 and recited again as “the surface” in line 18.

Claim 23, lines 2-3, the recitation that the intake portion and outlet portion in combination “are of a length to extend substantially to the waist level of a user” is vague, indefinite, and confusing because the length will probably not extend to the waist level of a particularly short user or a particularly tall user and therefore, the length of the combined intake and outlet portions cannot be defined in terms of the user because users will be of varying sizes.

Claim 25, lines 1-2, the recitation of “a first handle member” is vague, indefinite, and confusing as lacking antecedent basis since it is not clear if the “first handle member” is one of the “at least one handle member” recited in line 2 of claim 24 or is in addition to the at least one handle member.

Claim 26, lines 1-2, the recitation of “a second handle member” is vague, indefinite, and confusing as lacking antecedent basis since it is not clear if the “second handle member” is one of the “at least one handle member” recited in line 2 of claim 24 or is in addition to the at least one handle member.

Claim 26, lines 2-3, the recitation that a second handle member extends “at an angle to said first handle member” is vague, indefinite, and confusing because it is not understood from the Replacement Sheet showing Fig. 1 filed on 30 November 2005 how the handles 110 and 112 “extend” at an angle to each other since they both appear to be in the same plane.

Claim 27, line 2, the recitation that “said handle members are located on said intake and outlet portions” is vague, indefinite, and confusing since only one of the first and second handle members is located on the intake portion and only one of the first and second handle members is located on the outlet portion. Therefore, the examiner suggests amending to recite which of the first and second handle members is located on the intake portion and which of the first and second handle members is located on the outlet portion.

Claim 28, lines 1-4, the recitation that “a pressure state is created within said intake portion such that when the intake portion is lifted off of the surface, said rock in

said intake portion returns to said surface” is vague, indefinite, and confusing as stating only a presumed effect which it is not clear the apparatus is capable of performing.

Claim 29, lines 2-3, the recitation that “said intake portion is at least twice as long as said outlet portion” is vague, indefinite, and confusing because there is no support for this in the specification and since patent drawings are not drawn to scale, the drawings cannot be said to show that the intake portion is at least twice as long as the outlet portion.

Claim 30, line 4, the recitation of “the inlet portion” is vague, indefinite, and confusing as lacking antecedent basis because no “inlet portion” (only an intake portion and an outlet portion have been introduced) has been introduced in claim 22 or in lines 1-4 of claim 30.

Claim 31, lines 3-4, the recitation of an elongated tubular intake portion having a first diameter “throughout” is vague, indefinite, and confusing since it is not clear what is meant by “throughout”. Throughout what? If Applicant is trying to recite that the intake portion (106) has the same diameter from the intake opening (118) in Fig. 3 to the opposite end wall (i.e., where the intake portion 106 meets the skirt 120), then this should be stated more clearly.

Claim 31, lines 6-7, the recitation that the first diameter of the intake portion is “almost twice as great as” the second diameter of the outlet portion is vague, indefinite, and confusing as not being supported by the specification and since patent drawings are not drawn to scale so that the drawings cannot be said to show that the intake portion has a diameter almost twice the diameter of the outlet portion.

Claim 31, line 9, the recitation of “a means for deflecting rocks from entering said outlet portion” is vague, indefinite, and confusing as not being understood what structure constitutes the “means for deflecting” since the specification does not define any structure as being “a means for deflecting” so that it is not clear what structure serves as “a means for deflecting” and therefore, the metes and bound of the claim cannot be ascertained.

From lines 10-12 of claim 31, it appears that Applicant may be defining the end wall of the intake portion (106) as being the “deflecting means”. However, Figs. 1 and 3 appear to be inconsistent with Fig. 2 in that Fig. 2 clear shows that most of the beginning end of outlet portion “108) is contained inside of the intake portion (106) so that the end wall of the intake portion (106) is very near the top end of the handle (110). This is not the case with Figs. 1 and 3 which appear to show the top end of the handle (110) is quite a distance from the end wall of the intake portion (106). It is noted that Fig. 3 does not show end portion (113) as does Fig. 2.

Claim 31, lines 15-16, the recitation of said intake portion and said outlet portion “being of a length to extend to the waist level of a user” is vague, indefinite, and confusing because the length will probably not extend to the waist level of a particularly short user or a particularly tall user and therefore, the length of the combined intake and outlet portions cannot be defined in terms of the user because users will be of varying sizes.

Claim 31, lines 18-21, the recitation of “means for grasping and maneuvering said intake portion and said outlet portion in the hands of a user to facilitate

Art Unit: 3635

advancement and positioning of said apparatus on the landscape surface” is vague, indefinite, and confusing because it is not clear if applicant is claiming one of both of handles (110) and (112).

Claim 33, lines 1-3, the recitation of “a diameter of said open entrance end is equivalent to a diameter of said opposite end wall” is vague, indefinite, and confusing as lacking antecedent basis. First, “a diameter” of said open entrance end lacks antecedent basis because it is not clear if “a diameter” is the same as or different from “a first diameter” of the intake portion introduced in lines 3-4 of claim 31. Second, “said opposite end wall” lacks antecedent basis since this term has not been previously introduced in claim 31 and “a diameter” of said opposite end wall lacks antecedent basis because it is not clear if “a diameter” is the same as or different from “a first diameter” of the intake portion introduced in lines 3-4 of claim 31. Finally, the recitation of the diameters being “equivalent” is not understood. Equivalent in what way? Perhaps, Applicant should amend “equivalent” to being --substantially equal--.

Claim 34, lines 3-4, the recitation of “at substantially right angles” to the direction of flow through said intake portion is vague, indefinite, and confusing since it is not understood how the end wall extends at more than one right angle to the direction of flow of air through said intake portion.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22-28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by BUNCH (U.S. Patent No. 5,655,245).

As to claim 22 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph lack of written description/new matter and indefiniteness problems discussed above), BUNCH discloses an apparatus (gravel cleaner 10) for separating debris from rock on a surface free of standing water comprising:

a power vacuum source (pump; see col. 2, lines 55-57);

an elongated tubular intake portion (20/18) of a first diameter having an open entrance end (36) and an opposite end wall (30);

an elongated tubular outlet portion (34) of a second diameter smaller than said first diameter of said intake portion (20/18) including an end portion extending centrally through said end wall (30) into fluid communication with the interior of said intake portion (20/18) and an outlet end in communication with said vacuum source (pump), said intake portion (20/18) being of a length substantially greater than that of said outlet portion (34); and

means for grasping (48, 48) said apparatus in the hands of a user to facilitate advancement in a slightly raised position along said surface to permit the introduction of air, debris and rock into said intake portion (20/18) whereupon any debris lighter than rock will be drawn upwardly through said outlet portion (34) into said vacuum source and any rock lifted from the surface will return to the landscape surface (see col. 2, lines

Art Unit: 3635

51-53 and col. 4, lines 24-27, wherein it is disclosed that when the operator lifts the gravel cleaner 10 from the pond bottom, gravel in the lower and upper housings 20/18 will fall back through the lower housing 20).

With respect to the intended use recitation in the preamble, it is the examiner's position that the apparatus of BUNCH is capable of performing the intended use of "separating debris from rock on a surface free of standing water".

Additionally, the examiner notes that the adjective "central" and the adverb "centrally" have many different definitions. Indeed, Merriam-Webster's Collegiate® Dictionary (Tenth Edition, Copyright 1997, published by Merriam-Webster, Incorporated, Springfield, Massachusetts) defines "central" as any of "containing or constituting a center", "situated at, in, or near the center", "easily accessible from outlying districts", "centrally placed and superseding separate scattered units", "controlling or directing local or branch activities", and "holding the middle between extremes".

Thus, with respect to the recitation of "extending centrally through" in line 8, it is also the examiner's position that the end of the outlet (34) of the apparatus of BUNCH extends centrally through the end wall (30) by virtue of its being located along a central axis of end wall (30) as can be seen in Fig. 3 with the central axis being located between the handles (48, 48).

As to claim 23 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph lack of written description/new matter and indefiniteness problems discussed above), BUNCH discloses the apparatus according to claim 22 as discussed above, and although BUNCH does not explicitly disclose that the intake portion (20/18)

Art Unit: 3635

and the outlet portion (34) in combination are of a length to extend substantially to the waist level of a user, this must be the case because when the operator stands behind the gravel cleaner (10) and grasps the handles (48, 48) to clean the gravel, the intake portion (20/18) and outlet portion (34) are held at an angle to the ground (i.e., form the hypotenuse of a right triangle) and therefore, must be longer than the straight up and down length from the ground to the operator's waist. This is necessarily the case because if the length of the combined intake portion (20/18) and outlet portion (34) of the BUNCH apparatus were not substantially greater than the waist level height of the operator, it would be too uncomfortable for the operator to have to bend over continually to perform the cleaning operation (see col. 3, lines 41-43, wherein it is stated that "[t]he inclination of the cleaner 10 allows the operator to have greater control over it while putting less strain on the operator's back" and thus it can be inferred that is it inherent that the combined length of the intake portion 20/18 and outlet portion 34 is at least as long or longer than the ground to waist height of the operator).

As to claim 24 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph lack of written description/new matter and indefiniteness problems discussed above), BUNCH discloses the apparatus according to claim 22 as discussed above, and BUNCH also discloses that said grasping means (48, 48) includes at least one handle member (48, 48).

As to claim 25 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph lack of written description/new matter and indefiniteness problems discussed above), BUNCH discloses the apparatus according to claim 24 as discussed

above, and BUNCH also discloses that a first handle member (48) extends parallel to a longitudinal axis of said intake portion (20/18).

The examiner notes that the uprights of the handles (48, 48) are parallel to the longitudinal axis of the gravel cleaner apparatus 10 of BUNCH.

As to claim 26 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph lack of written description/new matter and indefiniteness problems discussed above), BUNCH discloses the apparatus according to claim 25 as discussed above, and BUNCH also discloses that said a second handle member (48) extends at an angle (180 degrees) to said first handle member (48).

As to claim 27 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph lack of written description/new matter and indefiniteness problems discussed above), BUNCH discloses the apparatus according to claim 26 as discussed above, and BUNCH also discloses that said handle members (48, 48) are located on said intake and outlet portions.

It is the examiner's position that since lid (30) constitutes the end of the intake portion (20/18) and a beginning of the outlet portion (34) and the handles (48, 48) are located on the lid (30), the handles are located on both the intake portion (20/18) and the outlet portion (34).

As to claim 28 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph lack of written description/new matter and indefiniteness problems discussed above), BUNCH discloses the apparatus according to claim 22 as discussed above, and BUNCH also discloses that a pressure state is created within said intake

portion (20/18) such that when the intake portion (20/18) is lifted off of the surface (@14 in Fig. 1), said rock (66, 68) in said intake portion (20/18) returns to said surface (@ 14).

The examiner notes that at col. 2, lines 51-53 and col. 4, lines 24-27, of BUNCH, it is disclosed that when the operator lifts the gravel cleaner (10) from the pond bottom, gravel in the lower and upper housings (20/18) will fall back through the lower housing (20).

As to claim 30 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph lack of written description/new matter and indefiniteness problems discussed above), BUNCH discloses the apparatus according to claim 22 as discussed above, and BUNCH also discloses that the outlet portion (34) is disposed in a head assembly (30) configured for attachment to the-intake portion (20/18) with the outlet portion (34) in direct fluid communication with the inlet portion (20/18).

Although it is not entirely clear to the examiner what a "head assembly" is, she has consulted both the specification and a dictionary in an attempt to resolve the issue of exactly what the term "head assembly" means.

In his specification, page 3, line 5 of Paragraph No [00012] through page 4, the last line of Paragraph No. [00013], Applicant discloses, as follows:

...The outlet portion 108 can comprise e.g. a head assembly 104with [sic] an integrally formed conduit 105 that is shaped as a bent elbow with respective inlet and outlet portions 105a and 105b, respectively, that extend at an angle X relative to each other. The head assembly 104 also has a coupling structure, described more fully below, for coupling the head assembly to the intake portion 106, and a hose coupling 109 configured for attachment to the vacuum source 102. When the intake portion 106 is attached to the head assembly 104, the intake portion 106 is in direct fluid communication with the inlet portion 105a of the conduit 105, and the intake portion 106 extends at a predetermined

Art Unit: 3635

angle to the outlet portion 105b of conduit 105. Since the conduit 105 is in fluid communication with the vacuum source 102 and the intake conduit 106, a vacuum applied to the conduit 105 is also communicated with the intake portion 106.

The cleaning device has a pair of handles 110, 112. A rear handle 110 is connected with the head assembly 104. A front handle 112 is connected to a location on the head assembly 104 that is near the junction of the head assembly and the intake portion 106. The handles 110, 112 are preferably formed in one piece with the head assembly 104, but can also be secured to the exterior of the cleaning device by any type of connection device (e.g. the handles can be bolted, strapped or otherwise secured to the cleaning device). Provision of more than one handle enables the cleaning device to be conveniently held by an operator in an advantageous position for cleaning a landscape surface 114, in the manner contemplated by the present invention.

At page 6, in Paragraph No. [00019], the head assembly is also discussed as follows:

The head assembly 104 is configured to be conveniently coupled to the intake portion 106. The head assembly 104 has an outer skirt 120 that is configured to receive the upper end of the intake portion 106. The outer skirt 120 has slits at select locations, to form the skirt into sections that are flexible enough to be clamped (tightened) against the intake portion. In the figures, a pair of slits 124, 126 are shown in the skirt 120, and cause skirt sections 120a and 120b to be formed in the skirt 120. The skirt sections are flexible enough to be clamped (tightened) against the intake portion. The skirt sections have posts that are formed in one piece with the skirt sections (see e.g. posts 130 in Figures 3, 4) and fasteners such as stove bolts 132 and nuts 134 (Figure 4) that are tightened against the posts 130, to enable the skirt sections to be clamped (tightened) against the intake portion 106.

Merriam-Webster's Collegiate® Dictionary (Tenth Edition, Copyright 1997, published by Merriam-Webster, Incorporated, Springfield, Massachusetts) did not have a definition for the entire term "head assembly", but defines the word "head" as "the end that is upper or higher or opposite the foot" and the word "assembly" as "the fitting together of manufactured parts into a complete machine, structure, or unit of a

Art Unit: 3635

machine". Therefore, it is reasoned that a "head assembly" would be the fitting together of parts into a complete structure that is at the upper or higher end of the device.

Therefore, the examiner is considering the lid (30) of BUNCH to read on Applicant's "head assembly" language so that the structure of BUNCH meets the claim language of "the outlet portion (34) is disposed in a head assembly (30) configured for attachment to the-intake portion (20/18) with the outlet portion (34) in direct fluid communication with the inlet portion (20/18)".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 29 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over BUNCH (U.S. Patent No. 5,655,245).

As to claim 29 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph lack of written description/new matter and indefiniteness problems discussed above), BUNCH discloses the apparatus according to claim 22 as discussed above.

BUNCH fails to explicitly disclose that said intake portion is at least twice as long as said outlet portion.

However, it is well settled that changes in size/proportion (i.e., dimensions) do not constitute patentable subject matter. Indeed, in *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of BUNCH by making the intake portion is at least twice as long as the outlet portion in order to provide sufficient space to allow for the debris to be separated from the gravel so that the gravel will be cleaned before being deposited back on the surface and since proportions/dimensions do not constitute patentable subject matter.

As to claim 31 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph lack of written description/new matter and indefiniteness problems discussed above), BUNCH discloses an apparatus (gravel cleaner 10) for separating debris from rock on a landscape surface in a dry environment comprising:

an elongated tubular intake portion (20/18) having a first diameter throughout (the lower housing section 20);

an elongated tubular outlet portion (34) having a second diameter;

said intake portion (20/18) having an open entrance end (36) and a means for deflecting rocks (30) from entering said outlet portion (34), said outlet portion (34)

Art Unit: 3635

including an end portion (where 34 connected to 30) extending centrally through said deflecting means (30) into fluid communication with an interior of said intake portion (20/18);

a power vacuum source (pump; see col. 2, lines 55-57) in communication with an outlet end of said outlet portion (34);

said intake portion (20/18) and said outlet portion (34) in combination being of a length to extend to the waist level of a user; and

means for grasping and maneuvering (48, 48) said intake portion (20/18) and said outlet portion (34) in the hands of a user to facilitate advancement and positioning of said apparatus on the landscape surface.

With respect to the intended use recitation in the preamble, it is the examiner's position that the apparatus of BUNCH is capable of performing the intended use of "separating debris from rock on a landscape surface in a dry environment".

In addition, the examiner notes that the adjective "central" and the adverb "centrally" have many different definitions. Indeed, Merriam-Webster's Collegiate® Dictionary (Tenth Edition, Copyright 1997, published by Merriam-Webster, Incorporated, Springfield, Massachusetts) defines "central" as any of "containing or constituting a center", "situated at, in, or near the center", "easily accessible from outlying districts", "centrally placed and superseding separate scattered units", "controlling or directing local or branch activities", and "holding the middle between extremes".

Thus, with respect to the recitation of "extending centrally through" in lines 10-11, it is also the examiner's position that the end portion of the outlet (34) of the apparatus

Art Unit: 3635

of BUNCH extends centrally through the end wall (30) by virtue of its being located along a central axis of end wall (30) as can be seen in Fig. 3 with the central axis being located between the handles (48, 48).

BUNCH fails to explicitly disclose that the first diameter is almost twice as great as said second diameter. The examiner notes that although patent drawings are not drawn to scale, it appears that the diameter of the intake portion 20/18 is intended to be much greater than even twice the diameter of the outlet portion 34.

Further, it is well settled that changes in size/proportion (i.e., dimensions) do not constitute patentable subject matter. Indeed, in *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of BUNCH by making the first diameter be almost twice as great as said second diameter in order to prevent gravel from entering into the outlet portion so that the gravel will be cleaned in the intake portion and then will be deposited back on the surface and since proportions/dimensions do not constitute patentable subject matter.

As to claim 32 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph lack of written description/new matter and indefiniteness problems

Art Unit: 3635

discussed above), BUNCH discloses the apparatus according to claim 31 as discussed above.

BUNCH fails to explicitly disclose that said outlet portion is substantially elbow shaped.

However, it is well-settled that changes in shape do not constitute patentable subject matter. See *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966), wherein the court held that the configuration of the claimed disposable plastic nursing container was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed container was significant.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of BUNCH by making the outlet portion be substantially elbow shaped in order to make it harder for gravel to travel through the outlet portion and since shape does not constitute patentable subject matter.

As to claim 33 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph lack of written description/new matter and indefiniteness problems discussed above), BUNCH discloses the apparatus according to claim 31 as discussed above, and BUNCH also discloses that a diameter of said open entrance end (36) is equivalent to a diameter of said opposite end wall (30).

The examiner notes that since equivalent does not necessarily mean equal, the open entrance end (36) of the intake portion (20/18) of the BUNCH apparatus is considered to be equivalent to the opposite end wall (30).

As to claim 34 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph lack of written description/new matter and indefiniteness problems discussed above), BUNCH discloses the apparatus according to claim 31 as discussed above, and BUNCH also discloses that said deflecting means (30) includes an end wall (30) opposite said open entrance end (36) with a central opening (where 34 is connected to 30), said end wall (30) extending at substantially right angles to the direction of flow through said intake portion (20/18).

The examiner notes that the adjective “central” and the adverb “centrally” have many different definitions. Indeed, Merriam-Webster’s Collegiate® Dictionary (Tenth Edition, Copyright 1997, published by Merriam-Webster, Incorporated, Springfield, Massachusetts) defines “central” as any of “containing or constituting a center”, “situated at, in, or near the center”, “easily accessible from outlying districts”, “centrally placed and superseding separate scattered units”, “controlling or directing local or branch activities”, and “holding the middle between extremes”.

Thus, with respect to the recitation of “a central opening” in the end wall (30) in line 3, it is also the examiner’s position that the end portion of the outlet (34) of the apparatus of BUNCH extends centrally through the end wall (30) by virtue of its being located along a central axis of end wall (30) as can be seen in Fig. 3 with the central axis being located between the handles (48, 48).

Response to Arguments

Applicant's arguments filed 30 November 2005 have been fully considered but they are not persuasive.

On page 16 of the Remarks section of the Amendment filed on 30 November 2005, Applicant argues that "Bunch does not teach an intake portion having a first diameter and an outlet portion having a second diameter." The examiner disagrees because Applicant has not adequately defined the intake portion as having a constant diameter from intake opening (118) to the opposite end wall.

Applicant also argues that BUNCH does not teach that the outlet portion has a second diameter smaller than the first diameter of the intake portion. The examiner disagrees. This is clearly shown in the drawing and although patent drawings are not drawn to scale, it is shown that the diameter of the outlet portion is smaller than the diameter of the intake portion.

Applicant also argues BUNCH does not disclose an end portion extending centrally through the end wall of the intake portion. Again the examiner disagrees because Applicant has not adequately defined the location of the end portion since the end portion of BUNCH (wherein the end of 34 meets 30) is located at least along one central axis of the end wall 30 (i.e., the central axis between the handles 48, 48).

Applicant also argues that "Applicant's invention possesses an intake portion and an outlet portion but does not teach any type of manifold aperture, which is a central element of Bunch's device". In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which

applicant relies (i.e., the BUNCH apparatus has a manifold aperture and Applicant's apparatus does not) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant also argues that the BUNCH reference does not possess dual handle members. The examiner disagrees and points Applicant's attention to both reference numerals "48" in Fig. 3 of BUNCH which represent dual handle members.

In the paragraph spanning the last line of page 16 to line 15 of page 17 in the Remarks section of the Amendment filed on 30 November 2005, Applicant argues that BUNCH is specifically for use on a surface free of standing water and "does not appear to be operable in a dry environment due to the presence of the inlet manifold 52 and manifold apertures 56." More particularly, Applicant's argue that the "inlet manifold 52 would prevent the creation of adequate pressure within the intake portion of applicant's device." The examiner disagrees, does not understand why adequate pressure would not be created, and points the Applicant's attention to col. 4, lines 48-56 of BUNCH wherein it is noted although a novel feature of the invention is projecting fluid radially inward to break up gravel clusters, there are many different ways of implementing this concept which would be apparent to one of ordinary skill in the art. Further, it is stated that the fluid is preferably water, but could be air. Therefore, it is clear that BUNCH contemplated using his invention in a dry environment.

Finally, Applicant argues with respect to claim 30 that BUNCH "clearly does not teach a method of separating debris from rocks requiring an end wall having use as a

Art Unit: 3635

deflection surface” (emphasis added). Is Applicant arguing method or article of manufacture? With respect to structure, Applicant states that “[t]he limited opening of the outlet portion of applicant’s device in combination with the end wall, prevents rocks from entering the outlet portion. The examiner notes that BUNCH shows exactly the same structure of a limited opening at the outlet portion and an end wall (30) for deflecting and prevent rocks from entering the outlet portion and therefore, it is not seen how claim 30 distinguishes over BUNCH.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gay Ann Spahn whose telephone number is (571)-272-7731. The examiner can normally be reached on Monday through Thursday, 8:30 am. to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Naoko N. Slack can be reached on (571)-272-6848. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gay Ann Spahn, Patent Examiner
September 11, 2006


NAOKO SLACK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600